WHAT IS CLAIMED IS:

1. A full-closed control apparatus for performing speed control based on a speed signal of a motor and performing position control based on a position signal of a load driven by said motor, comprising:

an equivalent rigid system speed loop model;

a band-pass filter;

an amplitude adjuster; and

speed-command compensation means for inputting a speed command of a speed control loop into said equivalent rigid system speed loop model, inputting a difference signal obtained by subtracting an output of said equivalent rigid system speed loop model from a speed signal of said load into said band-pass filter, inputting an output of said band-pass filter into said amplitude adjuster and outputting a signal obtained by adding an output of said amplitude adjuster to an output of a position controller, as a new speed command.

2. A full-closed control apparatus for performing speed control based on a speed signal of a motor and performing position control based on a position signal of a load driven by said motor, comprising:

an all-pass filter;

a band-pass filter;

an amplitude adjuster; and

speed-command compensation means for inputting a difference signal obtained by subtracting a speed command of a speed control loop from a speed signal of said load into said all-pass filter, inputting an output of said all-pass filter into said band-pass filter, inputting an output of said band-pass filter into said amplitude adjuster and outputting a signal obtained by adding an output of said amplitude adjuster to an output of a position controller, as a new speed command.

3. A full-closed control apparatus for performing speed control based

on a speed signal of a motor and performing position control based on a position signal of a load driven by said motor, comprising:

an equivalent rigid system speed loop model;

an all-pass filter;

a band-pass filter;

an amplitude adjuster; and

speed-command compensation means for inputting a speed command of a speed control loop into said equivalent rigid system speed loop model, inputting a difference signal obtained by subtracting an output of said equivalent rigid system speed loop model from a speed signal of said load into said all-pass filter, inputting an output of said all-pass filter into said band-pass filter, inputting an output of said band-pass filter into said amplitude adjuster and outputting a signal obtained by adding an output of said amplitude adjuster to an output of a position controller, as a new speed command.